CLAIMS

- 1. A communication apparatus comprising:
- a transmission mode determining section that determines a transmission mode for controlling a transmission bit rate of a signal transmitted from an apparatus of a communicating party according to a level of ambient noise included in an input signal and transmits said transmission mode to said apparatus of the communicating party; and
- a decoding section that decodes an information source code obtained by coding the input signal at a transmission bit rate corresponding to said transmission mode at said apparatus of the communicating party based on said transmission mode transmitted from said apparatus of the communicating party.
 - 2. A communication apparatus comprising:
- a transmission mode determining section that determines a first transmission mode for controlling a transmission bit rate of a signal transmitted from the communication apparatus according to a level of ambient noise included in an input signal at an apparatus of a communicating party and a second transmission mode for controlling a transmission bit rate of an input signal of said communication apparatus based on a level of ambient noise included in the input signal at the communication apparatus; and

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a coding section that performs coding on the input signal at a transmission bit rate corresponding to said second transmission mode and transmits an information source code obtained through the coding and said second transmission mode to the apparatus of the communicating party.

- 3. A communication apparatus comprising:
- a decoding section that decodes an information 10 source code obtained through coding at an apparatus of a communicating party;
 - a transmission mode determining section that determines a transmission mode for controlling a transmission bit rate of an input signal according to a level of ambient noise in the signal decoded at said decoding section; and

a coding section that performs coding on said input signal at a transmission bit rate corresponding to the transmission mode determined at said transmission mode determining section and transmits the information source code obtained through the coding and said transmission mode to the apparatus of the communicating party.

- 4. A communication apparatus comprising:
- a decoding section that decodes an information source code obtained through coding at an apparatus of a communicating party;

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a transmission mode determining section that determines a transmission mode for controlling a transmission bit rate of said input signal based on a level of ambient noise included in an input signal and a level of ambient noise of the signal decoded at said decoding section; and

a coding section that performs coding on said input signal at a transmission bit rate corresponding to the transmission mode determined at said transmission mode determining section and transmits the information source code obtained through the coding and said transmission mode to the apparatus of the communicating party.

5. A communication apparatus comprising:

- a transmission mode determining section that determines a transmission mode for controlling a transmission bit rate of a signal transmitted from an apparatus of the communicating party according to a level of ambient noise included in an input signal and transmits said transmission mode to said apparatus of the communicating party; and
- a decoding section that decodes an information source code obtained by coding the input signal at a transmission bit rate corresponding to said transmission mode by said apparatus of the communicating party based on the transmission mode determined by said transmission mode determining section.

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- 6. A communication apparatus comprising a coding section that performs coding on an input signal at a transmission bit rate corresponding to a transmission mode determined by the communication apparatus according to claim 1 and transmits an information source code obtained through the coding and said transmission mode to said communication apparatus according to claim 1.
- 7. The communication apparatus according to claim 1, wherein the transmission mode determining section calculates a maximum value and minimum value of a power value of the input signal for a predetermined time and detects the level of ambient noise included in the input signal using at least one of the maximum value and minimum value of said power value.
 - 8. The communication apparatus according to claim 7, wherein the transmission mode determining section detects the level of ambient noise based on a user's instruction.
 - 9. The communication apparatus according to claim 7, wherein the transmission mode determining section periodically detects the level of ambient noise included in the input signal.
 - 10. The communication apparatus according to claim 9,

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wherein the transmission mode determining section carries out processing of determining a transmission mode when the difference between the detected level of ambient noise and the previously detected level is greater than a predetermined threshold.

- 11. A signal coding/decoding method whereby a first communication apparatus and a second communication apparatus carry out radio communication, said second communication apparatus transmits an information source code obtained by coding an input signal to said first communication apparatus and said first communication apparatus decodes said information source code, the method comprising:
- at the first communication apparatus, determining a transmission mode for controlling a transmission bit rate of a signal transmitted from the second communication apparatus according to a level of ambient noise included in the input signal and transmitting said transmission mode to said second communication apparatus;

at the second communication apparatus, coding the input signal at a transmission bit rate corresponding to the transmission mode determined by said first communication apparatus and transmitting the information source code obtained through the coding to said first communication apparatus; and

at the first communication apparatus, decoding the

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information source code at said transmission bit rate transmitted from said second communication apparatus.

- 12. A signal coding/decoding method comprising:
- a step of determining a transmission mode for controlling a transmission bit rate of a signal transmitted from an apparatus of the communicating party according to a level of ambient noise included in an input signal and transmitting said transmission mode to said apparatus of the communicating party; and
 - a step by said apparatus of the communicating party of decoding an information source code obtained by coding the input signal at a transmission bit rate corresponding to said transmission mode based on said transmission mode transmitted from said apparatus of the communicating party.
 - 13. A signal coding/decoding method comprising:
- a step by an apparatus of the communicating party of decoding an information source code obtained through coding;
 - a step of determining a transmission mode for controlling a transmission bit rate of an input signal according to a level of ambient noise of said decoded signal; and
 - a step of coding said input signal at a transmission bit rate corresponding to said determined transmission

mode and transmitting the information source code obtained through the coding and said transmission mode to said apparatus of the communicating party.